

Wildlife Bureau Survey Note

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2011-12 Small Game Harvest Results

A random survey of licensed hunters was conducted following the 2011 small game season to determine the size and distribution of Iowa's small game harvest (Figure 1). Survey questionnaires were mailed to 8,233 license holders. Survey participants were asked which species they hunted, how many days they hunted, and how many of each species they harvested. Survey participants returned 3,411 usable questionnaires for a response rate of 41%. Based on these returns Iowa had 203,927 licensed hunters in 2011-12 and of these 59,154 indicated they hunted small game (pheasant, quail, partridge, cottontail, or squirrels Table 2). This is a 22% decrease in small game hunters compared to the year before.

By residency, the number of resident small game hunters decreased 23%, from 66,500 in 2010 to 52,507 in 2011, while the number nonresident small game hunters fell 25% from 9,327 in 2010 to 7,079 in 2011. Pheasant were the most commonly reported species hunted by small game hunters (76%), while squirrels were the second most sought after species with 34% of small game hunters indicating they hunted squirrels (Table 1).

Hunters from 43 different states visited Iowa last fall to hunt. Over 53% of Iowa's nonresident hunters came from 4 states, Minnesota, Wisconsin, Michigan, and Illinois in that order. The typical small game hunter reported hunting a little over 8 days last fall.

Ring-necked Pheasant. - An estimated 45,975 pheasant hunters (23% of licensed hunters, 76% of small game hunters) took to Iowa's fields last fall and harvested 108,905 roosters (Table 1 & 2). The number of pheasant hunters declined -23%, while total harvest declined -54% compared to 2010 estimates (Table 3). Roadside counts showed populations were down 40% compared to 2010, so the decline in hunters and harvest was expected. An estimated 6,460 nonresident hunters contributed to Iowa's total estimate of pheasant hunters. Iowa's peak year for nonresident pheasant hunters was 1997 with 50,349. Resident hunter numbers declined -23% while the number of nonresident pheasant hunters declined -27%. This year estimate of 45,975 pheasant hunters (77% below the historic average) sets a new all time low for pheasant hunter numbers in Iowa.

Resident hunters hunted an average of 5.6 days last fall and harvested 2 birds during the season. Nonresident pheasant hunters averaged 5.1 days afield and harvested 5 birds for the season (Table 3). Hunter success (harvest/day) was highest through the first 2 weekends of the season (Table 4). Approximately 36% of the total pheasant harvest occurred in the first 9 days of the 2011 season (Table 4). Sixty-six percent of pheasant hunters reported hunting 5 days or less. Resident hunters accounted for 70% of the total pheasant harvest.

This year's harvest estimate is the lowest ever recorded for Iowa since standardized estimates began in 1962. The harvest estimate was -81% below the 10-year average, and -91% below the historic average harvest of 1.2 million roosters. This marks the fifth time Iowa's total pheasant harvest has fallen under 500,000 roosters (2001, 08, 09, 10, 11). Five consecutive winters with statewide snowfall of 30 inches or more have decimated Iowa's pheasant numbers. Above normal rainfall in 2011 also reduced nest success. This sequence of poor weather and declining CRP habitat has Iowa's pheasant numbers at all time lows. Iowa's unprecedented

string of 5 consecutive severe winters and poor springs seems to have come to an end in 2012, it appears Iowa's pheasants will see the first increase in populations since 2005.

Bobwhite Quail. - Approximately 9,436 quail hunters (5% of licensed hunters, 16% of small game hunters) harvested 4,539 quail during the 2011 quail season (Table 1 & 2). Hunter numbers declined -11% and harvest declined -61% compared to 2010 estimates. This is another new all time low quail harvest for Iowa. Quail hunters averaged 6 days a field and harvested half a bird for the season (Table 3). Fifty percent of the quail harvest occurred in the first month of the 2011 season (Table 4). Fifty-eight percent of quail hunters hunted 5 days or less. Resident quail hunters accounted for 81% of the total quail harvest. Roadside counts showed quail numbers had declined 36% over 2010 estimates, caused by the severe winter of 2010-11 across Iowa's southern quail range, thus the decline in hunter harvest was expected.

Table 1. Proportion of eligible 2011 license buyers (those who bought a hunting license) and proportion of small game hunters (indicated they hunted small game) that hunted a particular species.

Species	Eligible Hunters	Small Game Hunters
Pheasants	22.5%	75.8%
Quail	4.6%	15.6%
Cottontail	8.4%	28.4%
Squirrels	10.0%	33.7%
Partridge	0.9%	2.9%
Jackrabbit	Closed	Closed
Mourning Dove	4.3%	14.5%

Figure 1. 2011-12 small game survey card.

2011-2012 Iowa Small Game Hunter Survey

Please report only YOUR SMALL GAME hunting IN IOWA. If you did not hunt small game in Iowa, please answer "No" to the first question and return this card.

Did you hunt SMALL GAME in IOWA during 2011-12? ☐ Yes ☐ No

Total number of days hunted in IOWA (for small game only):

Please report season totals AND period totals for pheasants and quail :

NOTE: the period totals must add up to equal the season total.

Wild Pheasants (not game farm)					Wild Quail (not game farm)				
SEASON TOTAL	Oct 29 to Nov 6	Nov 7-30	Dec 1 to Jan 10		SEASON TOTAL	Oct 29 to Nov 6	Nov 7-30	Dec 1 to Jan 10	Jan 11-31
Number YOU Harvested	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Number of Days Hunted	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Please report season totals for each species below:

	Cottontail Rabbit	Squirrel	Hungarian Partridge	Mourning Dove
Number YOU Harvested	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Number of Days Hunted	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Did you hunt on an Iowa Habitat and Access Program (IHAP) walk-in area during 2011-2012? (Denoted by orange signs.) ☐ Yes ☐ No

If YES, how many days did you hunt IHAP lands? Days

Machine-scanned form, please print neatly using blue or black ballpoint pen only.

Table 2. Estimated small game hunters, harvest, effort by species and license type for the 2011-12 small game season.

License/Species	Hunters		Harvest		Days	
	estimate	95% CI	estimate	95% CI	estimate	95% CI
ALL LICENSE TYPES						
Pheasant	45,975	± 3,908	108,905	± 19,642	249,922	± 31,452
Quail	9,436	± 2,011	4,539	± 3,053	55,114	± 14,869
Cottontail Rabbit	17,197	± 2,717	51,815	± 14,222	104,457	± 31,742
Squirrel	20,420	± 2,979	108,783	± 24,330	119,802	± 31,100
Hungarian Partridge	1,782	± 891	1,046	± 1,710	13,325	± 10,273
Jackrabbit		±		±		±
Mourning Dove	8,780	± 2,008	57,285	± 19,370	45,603	± 21,245
			Total Days ^a		481,025	± 65,873
RESIDENT HUNTERS						
Pheasant	39,515	± 3,804	75,897	± 16,213	219,515	± 30,719
Quail	8,574	± 1,972	3,664	± 2,960	51,577	± 14,705
Cottontail Rabbit	16,999	± 2,715	51,260	± 14,216	103,541	± 31,736
Squirrel	19,713	± 2,937	100,246	± 20,337	116,138	± 30,797
Hungarian Partridge	1,687	± 887	1,046	± 1,710	12,879	± 10,262
Jackrabbit		±		±		±
Mourning Dove	8,667	± 2,006	56,643	± 19,355	45,107	± 21,241
			Total Days		440,847	± 64,309
NONRESIDENT HUNTERS						
Pheasant	6,460	± 896	33,008	± 11,087	30,407	± 6,751
Quail	862	± 392	875	± 745	3,537	± 2,205
Cottontail Rabbit	198	± 116	555	± 409	916	± 632
Squirrel	707	± 503	8,537	± 13,356	3,664	± 4,327
Hungarian Partridge	95	± 85	0	± 0	446	± 484
Jackrabbit		±		±		±
Mourning Dove	113	± 88	642	± 758	496	± 389
			Total Days		40,178	± 14,271

^a Total days does not include mourning dove days of hunting.

Estimated number of people who hunted (pheasant, quail, partridge, cottontail, and squirrels):

59,154 ± 4,284

Estimated number of people who hunted upland game birds only (pheasant, quail, partridge) :

32,717 ± 3,338

Estimated number of people who hunted small game mammals only (cottontail, squirrel):

13,153 ± 2,441

Youth Pheasant Season (not surveyed in 2011-12)

NA	± NA	Adult Hunters
NA	± NA	Youths Hunted

Table 3. Estimated number of small game hunters, harvest, and days hunted, by license type, species, and year, in Iowa during the 2010-11 and 2011-12 small game seasons.

SPECIES	LICENSE TYPE								
	ALL LICENSE TYPES			RESIDENT			NONRESIDENT		
	2010	2011	%CHG	2010	2011	%CHG	2010	2011	%CHG
Ring-necked pheasant									
Hunters	60,058	45,975	-23%	51,258	39,515	-23%	8,800	6,460	-27%
Harvest	238,208	108,905	-54%	197,266	75,897	-62%	40,942	33,008	-19%
Days	388,596	249,922	-36%	347,067	219,515	-37%	41,529	30,407	-27%
Harvest/hunter	4.0	2.4	-40%	3.9	1.9	-50%	4.7	5.1	10%
Days/hunter	6.5	5.4	-16%	6.8	5.6	-18%	4.7	4.7	0%
Harvest/day	0.6	0.4	-28%	0.6	0.4	-39%	1.0	1.1	10%
Bobwhite quail									
Hunters	10,604	9,436	-11%	9,150	8,574	-6%	1,454	862	-41%
Harvest	11,620	4,539	-61%	9,572	3,664	-62%	2,048	875	-57%
Days	61,353	55,114	-10%	53,969	51,577	-4%	7,384	3,537	-52%
Harvest/hunter	1.1	0.5	-56%	1.1	0.4	-59%	1.4	1.0	-28%
Days/hunter	5.8	5.8	1%	5.9	6.0	2%	5.1	4.1	-19%
Harvest/day	0.2	0.1	-58%	0.2	0.1	-61%	0.3	0.3	-11%
Cottontail rabbit									
Hunters	22,005	17,197	-22%	21,183	16,999	-20%	822	198	-76%
Harvest	74,044	51,815	-30%	71,780	51,260	-29%	2,264	555	-75%
Days	113,597	104,457	-8%	110,204	103,541	-6%	3,393	916	-73%
Harvest/hunter	3.4	3.0	-10%	3.4	3.0	-11%	2.8	2.8	2%
Days/hunter	5.2	6.1	18%	5.2	6.1	17%	4.1	4.6	12%
Harvest/day	0.7	0.5	-23%	0.7	0.5	-23%	0.7	0.6	-9%
Squirrel									
Hunters	23,440	20,420	-13%	22,862	19,713	-14%	578	707	22%
Harvest	119,590	108,783	-9%	117,360	100,246	-15%	2,230	8,537	283%
Days	127,999	119,802	-6%	125,707	116,138	-8%	2,292	3,664	60%
Harvest/hunter	5.1	5.3	5%	5.1	5.1	-1%	3.9	12.1	213%
Days/hunter	5.5	5.9	8%	5.5	5.9	7%	4.0	5.2	30%
Harvest/day	0.9	0.9	-2%	0.9	0.9	-8%	1.0	2.3	140%
Hungarian partridge									
Hunters	1,229	1,782	45%	1,085	1,687	55%	144	95	-34%
Harvest	1,057	1,046	-1%	1,005	1,046	4%	52	0	-100%
Days	9,895	13,325	35%	8,871	12,879	45%	1,024	446	-56%
Harvest/hunter	0.9	0.6	-31%	0.9	0.6	-33%	0.4	0.0	-100%
Days/hunter	8.1	7.5	-7%	8.2	7.6	-7%	7.1	4.7	-34%
Harvest/day	0.1	0.1	-27%	0.1	0.1	-27%	0.1	0.0	-100%
White-tailed jackrabbit									
Hunters	541	Closed		505	Closed		36	Closed	
Harvest	0	Closed		0	Closed		0	Closed	
Days	3,568	Closed		3,522	Closed		46	Closed	
Harvest/hunter	0.0	Closed		0.0	Closed		0.0	Closed	
Days/hunter	6.6	Closed		7.0	Closed		1.3	Closed	
Harvest/day	0.0	Closed		0.0	Closed		0.0	Closed	

Table 4. Mean hunting effort and harvest by time period for pheasant and quail hunters during the 2011-12 small game season.

SPECIES	Mean days	Mean harvest	Harvest/day	Proportion of effort (days)	Proportion of the harvest
Ring-necked pheasants (N=670)					
Oct. 31- Nov. 8	1.85	1.09	0.59	30%	36%
Nov. 9- Nov. 30	2.51	1.15	0.46	41%	38%
Dec. 1- Jan. 10	1.71	0.80	0.47	28%	26%
Jan. 11- Jan 31	-	-	-	-	-
Bobwhite quail (N=120)					
Oct. 31- Nov. 8	2.17	0.14	0.07	31%	24%
Nov. 9- Nov. 30	2.64	0.15	0.06	38%	25%
Dec. 1- Jan. 10	1.86	0.29	0.16	26%	49%
Jan. 11- Jan 31	0.37	0.02	0.05	5%	3%

Table 5. Harvest and proportion of harvest by August roadside survey region for the 2011-12 small game season^a.

REGION	Ring-necked Pheasant		Bobwhite Quail		Cottontail Rabbit		Squirrel		Hungarian Partridge		Mourning Dove	
	N	%	N	%	N	%	N	%	N	%	N	%
NW	19,962	18.3%	480	10.6%	6,675	12.9%	1,520	1.4%	100	9.6%	6,451	11.3%
NC	3,172	2.9%	0	0.0%	3,573	6.9%	9,209	8.5%	24	2.3%	4,457	7.8%
NE	5,971	5.5%	228	5.0%	4,904	9.5%	18,497	17.0%	52	5.0%	3,879	6.8%
WC	9,197	8.4%	1,289	28.4%	5,663	10.9%	4,530	4.2%	0	0.0%	1,839	3.2%
C	15,581	14.3%	431	9.5%	9,675	18.7%	17,297	15.9%	870	83.2%	14,205	24.8%
EC	6,033	5.5%	104	2.3%	8,351	16.1%	28,112	25.8%	0	0.0%	12,413	21.7%
SW	10,409	9.6%	742	16.3%	7,010	13.5%	5,293	4.9%	0	0.0%	5,391	9.4%
SC	1,873	1.7%	156	3.4%	2,851	5.5%	5,124	4.7%	0	0.0%	1,716	3.0%
SE	3,699	3.4%	234	5.2%	2,558	4.9%	10,664	9.8%	0	0.0%	6,292	11.0%
Nonresident	33,008	30.3%	875	19.3%	555	1.1%	8,537	7.8%	0	0.0%	642	1.1%
Total	108,905		4,539		51,815		108,783		1,046		57,285	

^a County of residence is used to assign location, which may not be where person hunted.